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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/798,814	03/10/2004	Sung-Yong Kang	21C-0117	7126
23413 7590 07/15/2008 CANTOR COLBURN, LLP 20 Church Street 22nd Floor Hartford, CT 06103				
EXAMINER CHEN, WEN YING PATTY				
ART UNIT 2871		PAPER NUMBER		
MAIL DATE 07/15/2008		DELIVERY MODE PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/798,814

Applicant(s)

KANG ET AL.

Examiner

WEN-YING PATTY CHEN

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 April 2008.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
4a) Of the above claim(s) 1-8, 11, 14 and 16-21 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 9, 10, 12, 13 and 15 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 10 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on Apr. 17, 2008 has been entered.

Response to Amendment

The Amendment filed on Apr. 17, 2008 has been entered. Claims 1-21 remain pending in the current application and claims 1-8, 11, 14 and 16-21 are withdrawn from consideration.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 9, 10, 12, 13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uehara et al. (US 5659376) in view of Yamanaka (JP 9-022000A).

With respect to claim 9 (Amended): Uehara discloses in Figure 12 a backlight assembly comprising:

a receiving container (element 100C2) including a bottom plate and sidewalls protruded from edges of the bottom plate to form a receiving space (as shown in the figure);

a light exiting device (element 100B) disposed in the receiving space; and

a liquid crystal display panel supporting member including a first supporting member frame portion (elements 150 and 154 combined), a second supporting member frame portion (element 152) and a particle interceptor (element 151),

the first supporting member frame portion (elements 150 and 154 combined) having an opening (element 150a) formed in an internal face of the first supporting member frame portion,

the second supporting member frame portion (element 152) being vertically extended directly from the first supporting member frame portion (as shown in the figure), a side face of the liquid crystal display panel (element 101) that is to be mounted on the liquid crystal display panel supporting member facing an inner side face of the second supporting member frame portion, the second supporting member frame portion fixing the liquid crystal display panel (as shown in the figure),

the particle interceptor (element 151; which is the substrate support) being formed in a shape of a closed loop along a face of the first supporting member frame portion (Column 10, lines 16-17; wherein element 151 is formed surrounding the opening 150a of the first supporting member frame portion 150) facing the bottom plate (element 101b) of the liquid crystal display panel (element 101), the particle interceptor preventing particles from infiltrating into the particle interceptor.

Uehara does not disclose that the particle interceptor having at least one recess directly formed therein.

However, Yamanaka teaches in Figure 7 of using a substrate support having a recess directly formed therein.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to construct a backlight assembly as taught by Uehara wherein the substrate support has a recess directly formed therein as taught by Yamanaka, since Yamanaka teaches that having a substrate support of the specific configuration improves the shock resistance of the display panel and also helps to prevent invasion of garbage, which decreases the display performance (Paragraph 0037).

As to claims 10 and 13: Uehara further discloses in Column 10 line 16 that the particle interceptor comprises rubber, thus is made of a material having flowability.

As to claim 12: Since Uehara discloses in Column 10 lines 16-17 that the particle interceptor 151 is formed in a closed loop, therefore, the recess would also be in a shape of a closed loop.

With respect to claim 15 (Amended): Uehara et al. disclose in Figure 12 a backlight assembly comprising:

a receiving container (element 100C2) including a bottom plate and sidewalls protruded from edges of the bottom plate to form a receiving space (as shown in the figure);

a light exiting device (element 100B) disposed in the receiving space to exit a light;

a liquid crystal display panel (element 101) that converts the light into an image light;

a liquid crystal display panel supporting member including a first supporting member frame portion (elements 150 and 154 combined), a second supporting member frame portion (element 152) and a particle interceptor (element 151),

the first supporting member frame portion (elements 150 and 154 combined) having an opening (element 150a) formed in an internal face of the first supporting member frame portion,

the second supporting member frame portion (element 152) being vertically extended directly from the first supporting member frame portion (as shown in the figure), a side face of the liquid crystal display panel (element 101) that is to be mounted on the liquid crystal display panel supporting member facing an inner side face of the second supporting member

frame portion, the second supporting member frame portion fixing the liquid crystal display panel (as shown in the figure),

the particle interceptor (element 151) being formed in a shape of a closed loop along a face of the first supporting member frame portion (Column 10, lines 16-17; wherein element 151 is formed surrounding the opening 150a of the first supporting member frame portion 150) facing the bottom plate (element 101b) of the liquid crystal display panel (element 101), the particle interceptor preventing particles from infiltrating into the particle interceptor; and

a chassis (element 100C1) received in the receiving container, the chassis covering edges of a top face of the liquid crystal display panel (as shown in the figure).

Uehara does not disclose that the particle interceptor having at least one recess directly formed therein.

However, Yamanaka teaches in Figure 7 of using a substrate support having a recess directly formed therein.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to construct a backlight assembly as taught by Uehara wherein the substrate support has a recess directly formed therein as taught by Yamanaka, since Yamanaka teaches that having a substrate support of the specific configuration improves the shock resistance of the display panel and also helps to prevent invasion of garbage, which decreases the display performance (Paragraph 0037).

Claims 9, 10, 13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Niibori et al. (US 5808707) in view of Yamanaka (JP 9-022000A).

With respect to claim 9 (Amended): Niibori discloses in Figure 19 a backlight assembly comprising:

a receiving container (element 3e) including a bottom plate and sidewalls protruded from edges of the bottom plate to form a receiving space (as shown in the figure);

a light exiting device (element 27) disposed in the receiving space; and

a liquid crystal display panel supporting member including a first supporting member frame portion (the horizontally extended portion of element 17), a second supporting member frame portion (the vertically extended portion of element 17) and a particle interceptor (element 8),

the first supporting member frame portion (the horizontally extended portion of element 17) having an opening (element 19a) formed in an internal face of the first supporting member frame portion,

the second supporting member frame portion (the vertically extended portion of element 17) being vertically extended directly from the first supporting member frame portion (as shown in the figure), a side face of the liquid crystal display panel (element 1) that is to be mounted on the liquid crystal display panel supporting member facing an inner side face of the second supporting member frame portion, the second supporting member frame portion fixing the liquid crystal display panel (as shown in the figure and Column 15, lines 45-46),

the particle interceptor (element 8) being formed in a shape of a closed loop along a face of the first supporting member frame portion (Column 13, lines 21-32; wherein the elastic

member 8 is frame-shaped) facing the bottom plate of the liquid crystal display panel (element 1), the particle interceptor preventing particles from infiltrating into the particle interceptor.

Niibori does not disclose that the particle interceptor having at least one recess directly formed therein.

However, Yamanaka teaches in Figure 7 of using a substrate support having a recess directly formed therein.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to construct a backlight assembly as taught by Niibori wherein the substrate support has a recess directly formed therein as taught by Yamanaka, since Yamanaka teaches that having a substrate support of the specific configuration improves the shock resistance of the display panel and also helps to prevent invasion of garbage, which decreases the display performance (Paragraph 0037).

As to claims 10 and 13: Niibori further discloses in Column 13 lines 21-32 that the particle interceptor comprises rubber, thus is made of a material having flowability.

With respect to claim 15 (Amended): Niibori discloses in Figure 19 a backlight assembly comprising:

a receiving container (element 3e) including a bottom plate and sidewalls protruded from edges of the bottom plate to form a receiving space (as shown in the figure);

a light exiting device (element 27) disposed in the receiving space to exit a light;

a liquid crystal display panel (element 1) that converts the light into an image light;

a liquid crystal display panel supporting member including a first supporting member frame portion (the horizontally extended portion of element 17), a second supporting member

frame portion (the vertically extended portion of element 17) and a particle interceptor (element 8),

the first supporting member frame portion (the horizontally extended portion of element 17) having an opening (element 19a) formed in an internal face of the first supporting member frame portion,

the second supporting member frame portion (the vertically extended portion of element 17) being vertically extended directly from the first supporting member frame portion (as shown in the figure), a side face of the liquid crystal display panel (element 1) that is to be mounted on the liquid crystal display panel supporting member facing an inner side face of the second supporting member frame portion, the second supporting member frame portion fixing the liquid crystal display panel (as shown in the figure and Column 15, lines 45-46),

the particle interceptor (element 8) being formed in a shape of a closed loop along a face of the first supporting member frame portion (Column 13, lines 21-32; wherein the elastic member 8 is frame-shaped) facing the bottom plate of the liquid crystal display panel (element 1), the particle interceptor preventing particles from infiltrating into the particle interceptor; and

a chassis (element 3a) received in the receiving container, the chassis covering edges of a top face of the liquid crystal display panel (as shown in the figure).

Niibori does not disclose that the particle interceptor having at least one recess directly formed therein.

However, Yamanaka teaches in Figure 7 of using a substrate support having a recess directly formed therein.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to construct a backlight assembly as taught by Niibori wherein the substrate support has a recess directly formed therein as taught by Yamanaka, since Yamanaka teaches that having a substrate support of the specific configuration improves the shock resistance of the display panel and also helps to prevent invasion of garbage, which decreases the display performance (Paragraph 0037).

Response to Arguments

Applicant's arguments with respect to all claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WEN-YING PATTY CHEN whose telephone number is (571)272-8444. The examiner can normally be reached on 8:00-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David C. Nelms can be reached on (571)272-1787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

WEN-YING PATTY CHEN
Examiner
Art Unit 2871

/wpc/
7/10/08

/Andrew Schechter/
Primary Examiner, Art Unit 2871